

**REMARKS**

Claims 1, 22 and 24 are currently amended. The specification is also amended. Applicant respectfully submits that the amendments contained herein are fully supported by the specification and drawings as originally filed and do not contain new matter.

**Drawings**

The drawings were objected to under 37 CFR § 1.84(p)(5) because they do not include the reference numeral "20" mentioned in the specification. The specification has been amended to remove the reference numeral "20" thereby overcoming the rejection to the drawings. Applicant respectfully submits that the main body denoted by reference numeral "20" is clear from the description provided in the specification and does not require reference numeral "20."

**Specification**

The abstract was objected to. The abstract is amended to overcome the objection. A copy of the abstract as originally filed is attached as a separate sheet.

The specification was objected to in that it lacks proper headings. With regard to the arrangement of the specification and the headings, MPEP § 608.01(a) provides the following:

"The following order of arrangement of specification elements is preferable in framing the nonprovisional specification and each of the lettered items should appear in upper case, without underlining or bold type, as section headings. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading. It is recommended that provisional applications follow the same general format, although claims are not required. If an application data sheet (37 CFR 1.76) is used, data supplied in the application data sheet need not be provided elsewhere in the application except that the citizenship of each inventor must be provided in the oath or declaration under 37 CFR 1.63 even if this information is provided in the application data sheet. If there is a discrepancy between the information submitted in an application data sheet and the information submitted elsewhere in the application, the application data sheet will control except for the naming of the inventors and the citizenship of the inventors. See 37 CFR 1.76(d) and MPEP § 601.05."

(A) Title of the Invention.

(B) Cross-References to Related Applications.

(C) Statement Regarding Federally Sponsored Research or Development.

(D) The names of the parties to a joint research agreement.

(E) Reference to a "Sequence Listing," a table, or a computer program listing appendix submitted on a compact disc and an incorporation-by-reference of the material on the compact disc (See 37 CFR 1.52(e)(5)). The total number of compact discs including duplicates and the files on each compact disc must be specified.

(F) Background of the Invention.

(1) Field of the Invention.

(2) Description of the related art including information disclosed under 37 CFR 1.97 and 1.98.

(G) Brief Summary of the Invention.

(H) Brief Description of the Several Views of the Drawings.

(I) Detailed Description of the Invention.

(J) Claim or Claims.

(K) Abstract of the Disclosure.

(L) "Sequence Listing," if on paper (See 37 CFR 1.821-1.825)."

Applicant respectfully submits that the above order of arrangement of specification elements is merely a recommendation and not a requirement in that the above order of arrangement of specification elements is indicated, in MPEP § 608.01(a), as being *preferable* in framing the nonprovisional specification. In addition, MPEP § 608.01(a) indicates that each of the lettered items *should* appear in upper case, without underlining or bold type, as section headings, and that if no text follows the section heading, the phrase "Not Applicable" *should* follow the section heading. The presence of the terms "preferable" and "should" makes these suggestions as opposed to requirements. Therefore, Applicant contends that the above order of arrangement and heading format are not a requirement and that the objection should be removed.

Moreover, the preliminary amendment filed on January 20, 2006, a copy of which is attached, amended the specification to include headings. In view of the foregoing that the above arrangement and heading format are merely a suggestions and not requirements, Applicant respectfully submits that the headings presented in the amendment filed on January 20, 2006 are acceptable.

Claim Objections

Claim 24 was objected to. Claim 24 is amended to overcome the objection.

Claim Rejections Under 35 U.S.C. § 112

Claims 1, 15, and 17-30 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. Claims 1 and 22 are amended to overcome the rejection. Moreover, the amendment of claim 1 overcomes the rejection to claims 15, 17-21, and 23-30 in that claims 15, 17-21, and 23-30 depend from claim 1.

Claim Rejections Under 35 U.S.C. § 102

Claims 1, 15, 17, 19, 21-23, and 25-30 were rejected under 35 U.S.C. § 102(b) as being anticipated by Broussard (U.S. Patent No. 4,917,602). Applicant respectfully traverses.

The independent claim 1 discloses a bracket for lingual orthodontics. The essential feature of such device is, among the others, a specifically designed inclination of the housing (3) for the orthodontic wire. Nevertheless, the device is characterised by the particular combination of features as claimed in claim 1.

Broussard discloses an adjustable bracket assembly characterised by the fact that its tabs are slidably connected to the base in order to allow an adjustment of the device.

Furthermore, the brackets of Broussard have a housing for the archwire which is exactly perpendicular to the base (for all the disclosed embodiments).

The object of claim 1 differs from those described in Broussard for at least the following reasons:

1. Claim 1 has a housing for the archwire specifically inclined and forming an acute angle with respect to the base.
2. Claim 1 has all the tabs fixedly connected to the base and constructed in a single piece with the main body and the base of the device.

Hence, claim 1 is allowable over Broussard.

The claimed invention relates to bracket for lingual orthodontics. Such particular aspect is very important when considering non-obviousness.

In fact, Broussard refers to another kind of bracket, namely a bracket for labial orthodontics, as appears to a person skilled in the art by simply reading Broussard or viewing its figures 5, 6, 7, 8.

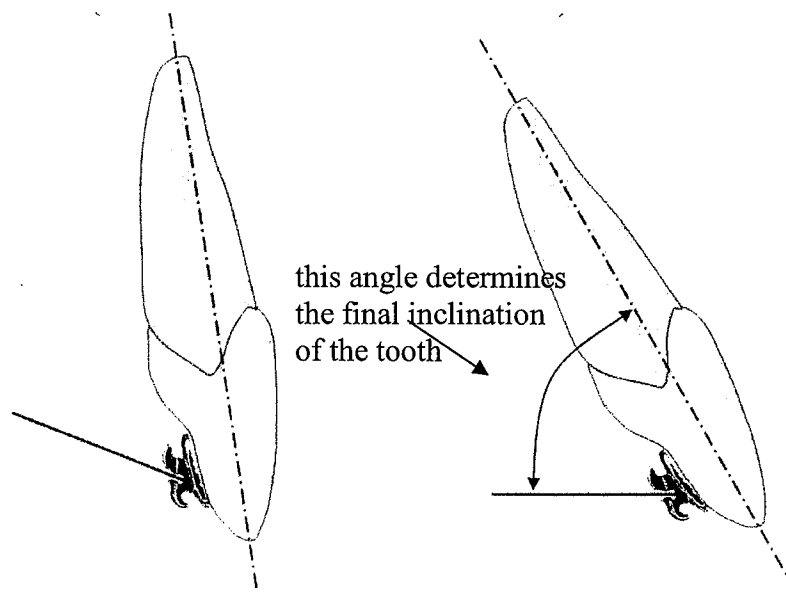
The claim 1 is intrinsically different from Broussard, because of the different mode of application on the surface of the teeth.

The device of Broussard can not be correctly used for lingual orthodontics. The main reason is that Broussard's housing for the wire is perpendicular to the base of the device.

Noted that a tooth has a particular shape and the surface which faces the inner part of the mouth is inclined with respect to the outer one.

If one places a classical "labial bracket" (that of Broussard) on the inner surface of a tooth, the housing for the wire is not correctly positioned in that the housing is perpendicular to the surface of the base.

According to the claimed invention, a specific bracket has been designed so that, when applied on the inner side of a tooth, the housing for the wire is correctly positioned so that the device works better because the tensions on the wire are more homogeneous, giving a more consistent positive effect. The following drawings clearly show this assertion.



**Example of correct application of a lingual bracket (the claimed one). On the left the tooth at the moment of the application, on the right the tooth after the orthodontics treatment.**

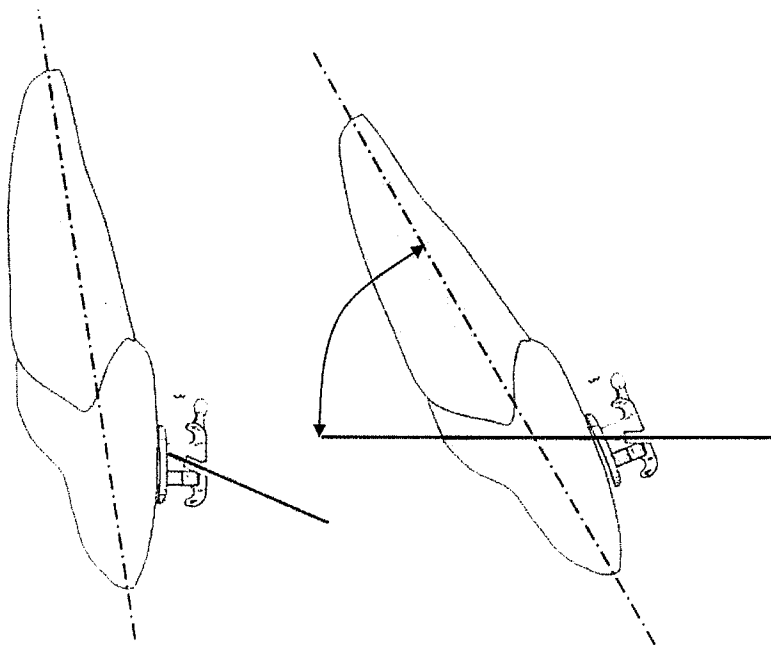
In view of the above, the technical problem solved by the claimed invention is to be regarded as that of providing a device which is perfected to be used as a "lingual bracket".

Claims 15, 17, 19, 21-23, and 25-30 depend from claim 1 and are thus allowable over Broussard for at least the same reasons as claim 1.

Claims 1, 17-22, and 25-29 were rejected under 35 U.S.C. § 102(b) as being anticipated by Viazis (U.S. Patent No. Des. 367,116). Applicant respectfully traverses.

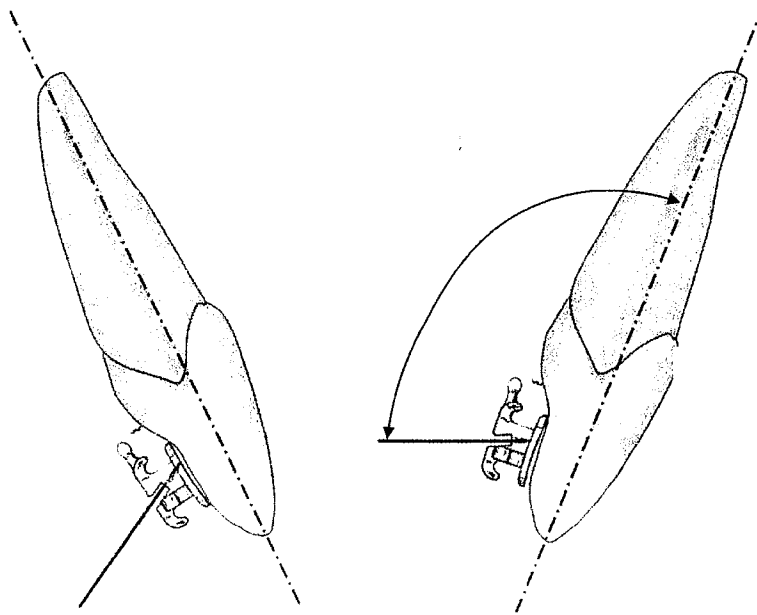
The device in Viazis is not a bracket for lingual orthodontics. On the contrary, is a bracket for labial orthodontics.

At first sight, the device in Viazis seems very similar to the claimed one. Nevertheless, it is very important to note that its design is exactly the opposite with respect to the claimed device. The bracket in Viazis has a slot for the wire which is inclined towards the so-indicated 3rd tab (the single tab on one side of the device). On the contrary, the claimed device has a slot which is inclined towards the opposite pair of tabs. This difference is essential. In fact, the device of Viazis cannot be used as a lingual bracket. The following drawings show the device of Viazis when is correctly used as a labial bracket.



Device of Viazis correctly used as a labial bracket

The following drawings show the device of Viazis if it is used as a lingual bracket.



**Device of Viazis erroneously used as a lingual bracket**

It appears that, if one would use the device of Viazis as a lingual bracket, it would not correctly operate, rather, it would force the tooth in a completely wrong direction so being cause of an anomalous and non physiological positioning of the tooth itself.

Hence, claim 1 should be considered allowable over Viazis.

Please note that Viazis is a design registration, its disclosure is therefore limited to the drawings contained therein and it does not give any technical indication on how to use the device. Viazis does not suggest different uses of the device. Therefore, Viazis does not indicate or suggest different designs of the slot. Furthermore, even a combination of the teachings of Viazis and Broussard does not teach or suggest each and every element of claim 1.

Claims 17-22 and 25-29 depend from claim 1 and are thus allowable over Viazis for at least the same reasons as claim 1.

Claim 24 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Viazis (U.S. Patent No. Des. 367,116). Applicant respectfully traverses.

Claim 1 is patentably distinct from Viazis. Moreover the taking of official notice that it would have been obvious to include a bracket having a portion between the base and retaining member to have a thickness of 1-1.2 mm fails to overcome the deficiencies of Viazis with respect to claim 1. Claim 24 depends from claim 1 and is thus allowable for at least the same reasons as claim 1.

**CONCLUSION**

In view of the above remarks, Applicant believes that all pending claims are in condition for allowance and respectfully requests a Notice of Allowance be issued in this case. Please charge any further fees deemed necessary or credit any overpayment to Deposit Account No. 501373.

If the Examiner has any questions or concerns regarding this application, please contact the undersigned at (612) 312-2208.

Respectfully submitted,

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Tod A. Myrum  
Reg. No. 42,922

Attorneys for Applicant  
Leffert Jay & Polglaze  
P.O. Box 581009  
Minneapolis, MN 55458-1009  
T (612) 312-2200  
F (612) 312-2250